

Figure 1A

ClustalW DNA Sequence Alignment of *sasp-B* Amplicons  
from 38 *Bacillus anthracis* Strains

|            | 1               | 15 16           | 30 31           | 45 46           | 60 61          | 75 76           | 90 |
|------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|----|
| 1 Bapast   | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 2 Bare1    | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 3 NMRI#67  | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 4 NMRI#63  | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 5 NMRI#62  | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 6 NMRI#60  | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 7 NMRI#1   | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 8 NMRI#2   | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 9 NMRI#4   | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 10 NMRI#5  | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 11 NMRI#6  | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 12 NMRI#10 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 13 NMRI#11 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 14 NMRI#18 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 15 NMRI#19 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 16 NMRI#20 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 17 NMRI#22 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 18 NMRI#23 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 19 NMRI#24 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 20 NMRI#25 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 21 NMRI#26 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 22 NMRI#28 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 23 NMRI#32 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 24 NMRI#35 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 25 NMRI#36 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 26 NMRI#38 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 27 NMRI#39 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 28 NMRI#40 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 29 NMRI#41 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 30 NMRI#42 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 31 NMRI#43 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 32 NMRI#50 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 33 NMRI#52 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 34 NMRI#53 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 35 NMRI#54 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 36 NMRI#55 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 37 NMRI#56 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |
| 38 NMRI#59 | AACAAGGCAACTTCT | GGTGTAGCATTTCAA | AGCACAAATGCTAGT | TATGTTACAGAGTTT | GGGACTGAAACAAT | GTACAAGCAGTAAAA |    |

Figure 1B

ClustalW DNA Sequence Alignment of *sazp-B* Amplicons  
from 38 *Bacillus anthracis* Strains

|            |                  |                 |                |                  |                 |                 |     |
|------------|------------------|-----------------|----------------|------------------|-----------------|-----------------|-----|
|            | 91               | 105 106         | 120 121        | 135 136          | 150 151         | 165 166         | 180 |
| 1 Bapast   | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 2 Barec1   | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 3 NMRI#67  | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 4 NMRI#63  | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 5 NMRI#62  | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 6 NMRI#60  | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 7 NMRI#1   | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 8 NMRI#2   | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 9 NMRI#4   | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 10 NMRI#5  | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 11 NMRI#6  | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 12 NMRI#10 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 13 NMRI#11 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 14 NMRI#18 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 15 NMRI#19 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 16 NMRI#22 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 17 NMRI#23 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 18 NMRI#23 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 19 NMRI#24 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 20 NMRI#25 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 21 NMRI#26 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 22 NMRI#28 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 23 NMRI#32 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 24 NMRI#35 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 25 NMRI#36 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 26 NMRI#38 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 27 NMRI#39 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 28 NMRI#40 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 29 NMRI#41 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 30 NMRI#43 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 31 NMRI#50 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 32 NMRI#52 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 33 NMRI#53 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 34 NMRI#54 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 35 NMRI#55 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 36 NMRI#56 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 37 NMRI#59 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |
| 38 NMRI#59 | CAAGCAAAACGCACAA | TCAGAAGCTAAGAAA | GCGCAAGCTTCTGT | GCTAGCATTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTGCA |     |

insertion region

Figure 1C

ClustalW DNA Sequence Alignment of *sasP*-*B* Amplicons  
from 38 *Bacillus anthracis* Strains

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181      195 196      210 211      225 226      240
1 Bapast ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 13)
2 Barecl ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 14)
3 NMRI#67 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 15)
4 NMRI#63 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 16)
5 NMRI#62 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 17)
6 NMRI#60 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 18)
7 NMRI#1 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 19)
8 NMRI#2 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 20)
9 NMRI#4 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 21)
10 NMRI#5 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 22)
11 NMRI#6 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 23)
12 NMRI#10 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 24)
13 NMRI#11 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 25)
14 NMRI#18 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 26)
15 NMRI#19 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 27)
16 NMRI#20 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 28)
17 NMRI#22 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 29)
18 NMRI#23 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 30)
19 NMRI#24 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 31)
20 NMRI#25 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 32)
21 NMRI#26 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 33)
22 NMRI#28 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 34)
23 NMRI#32 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 35)
24 NMRI#35 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 36)
25 NMRI#36 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 37)
26 NMRI#38 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 38)
27 NMRI#39 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 39)
28 NMRI#40 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 40)
29 NMRI#41 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 41)
30 NMRI#42 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 42)
31 NMRI#43 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 43)
32 NMRI#50 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 44)
33 NMRI#52 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 45)
34 NMRI#53 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 46)
35 NMRI#54 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 47)
36 NMRI#55 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 48)
37 NMRI#56 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 49)
38 NMRI#59 ACTGAACACAGACGTG CATGCTGTGAAAAA CAAATGACACAATCA GCTGCAAAACAA (SEQ ID NO: 50)

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Figure 2A

Drawing ClustalW Global *sasP-B* DNA Sequence Alignment of *Bacillus anthracis*,  
*Bacillus thuringiensis* and *Bacillus cereus* Strains

|            |                  |                  |                 |                 |                 |                  |    |
|------------|------------------|------------------|-----------------|-----------------|-----------------|------------------|----|
| 1 NMRI#15  | 1                | 15 16            | 30 31           | 45 46           | 60 61           | 75 76            | 90 |
| 2 1B       | AACAAAGGCAACTTCT | GGCGCTAGCATTTCAA | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTGCAAGCAGTAAAA  |    |
| 3 003      | AACAAAGGCAACTTCT | GGCGCTAGCATTTCAA | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTGCAAGCAGTAAAA  |    |
| 4 III      | AACAAAGGCAACTTCT | GGCGCTAGCATTTCAA | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTGCAAGCAGTAAAA  |    |
| 5 IV       | AACAAAGGCAACTTCT | GGCGCTAGCATTTCAA | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTGCAAGCAGTAAAA  |    |
| 6 BtB      | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 7 BtY      | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 8 4A1      | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 9 BtV      | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 10 BtZ     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 11 Beer3   | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 12 1B/A    | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 13 Beerpub | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 14 BtI     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 15 BtU     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 16 BtS     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 17 BtR     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 18 BtL     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 19 BtO     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 20 BtJ     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 21 4I2     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 22 BtG     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 23 BtI     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 24 Beer2   | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 25 BtC     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 26 BtE2    | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 27 BtE4    | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 28 BtK     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 29 BtM     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 30 BtN     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 31 BtP     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 32 BtX     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 33 Beer1   | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 34 BtQ     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 35 BtW     | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 36 Bc #57  | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |
| 37 Ba #11  | AACAAAGGCAACTTCT | GGTGTAGCATTTCAA  | AGTACAAATGCTAGT | TATGGTACAGAGTTT | TCAACTGAAACAGAT | GTACAAAGCAGTAAAA |    |

Figure 2B

Drawing ClustalW Global *clasp-B* DNA Sequence Alignment of *Bacillus anthracis*,  
*Bacillus thuringiensis* and *Bacillus cereus* Strains

|            |                   |                   |                 |                   |                 |                  |                  |                 |     |     |     |     |
|------------|-------------------|-------------------|-----------------|-------------------|-----------------|------------------|------------------|-----------------|-----|-----|-----|-----|
| 1 NMRI#15  | 91                | 105               | 106             | 120               | 121             | 135              | 136              | 150             | 151 | 165 | 166 | 180 |
| 2 1B       | CAAGCAAAATGACACAA | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 3 003      | CAAGCAAAATGACACAA | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 4 III      | CAAGCAAAATGACACAA | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 5 IV       | CAAGCAAAATGACACAA | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 6 BtB      | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 7 BtV      | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 8 4A1      | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 9 BtV      | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 10 BZ      | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 11 Beer3   | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 12 1B/A    | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 13 Beerpub | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 14 BtU     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 15 BtU     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 16 BS      | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 17 BtR     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 18 BtL     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 19 BtO     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 20 BtJ     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 21 4J2     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 22 BtG     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 23 BtI     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 24 Beer2   | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 25 BtC     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 26 BtE2    | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 27 BtE4    | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 28 BtK     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 29 BtM     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 30 BtN     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 31 BtP     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 32 BtX     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 33 Beer1   | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 34 BtQ     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 35 BtW     | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 36 NMRI#57 | CAAGCAAAACGCACAA  | TCAGAAAGCAAAAGAAA | GCACAAAGCTTCTGT | GCA               | -----           | CAAAGT           | GCAAAACGCTAGTTAT | GGTACTGAATTTGCA |     |     |     |     |
| 37 NMRI#11 | CAAGCAAAACGCACAA  | TCAGAAAGCTTAAGAAA | GGCACAAGCTTCTGT | GCTAGCATTTCAAAAGC | ACAAATGCTAGTTAT | GGTACAGAAATTTGCA |                  |                 |     |     |     |     |

Figure 2C

Drawing ClustalW Global *scsp-B* DNA Sequence Alignment of *Bacillus anthracis*,  
*Bacillus thuringiensis* and *Bacillus cereus* Strains

|            |  |         |         |         |     |
|------------|--|---------|---------|---------|-----|
| 1 NMRI#15  | 181  | 195 196 | 210 211 | 225 226 | 240 |
| 2 1B       | ACTGAAACAGATGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 51) |         |         |         |     |
| 3 003      | ACTGAAACAGATGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 52) |         |         |         |     |
| 4 III      | ACTGAAACAGATGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 53) |         |         |         |     |
| 5 IV       | ACTGAAACAGATGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 54) |         |         |         |     |
| 6 BiB      | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 55) |         |         |         |     |
| 7 BiY      | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 56) |         |         |         |     |
| 8 4A1      | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 57) |         |         |         |     |
| 9 BiV      | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 58) |         |         |         |     |
| 10 BiZ     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 59) |         |         |         |     |
| 11 Beer3   | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 60) |         |         |         |     |
| 12 1B/A    | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 61) |         |         |         |     |
| 13 Beerpub | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 62) |         |         |         |     |
| 14 BiT     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 63) |         |         |         |     |
| 15 BiU     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 64) |         |         |         |     |
| 16 BiS     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 65) |         |         |         |     |
| 17 BiR     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 66) |         |         |         |     |
| 18 BiL     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 67) |         |         |         |     |
| 19 BiO     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 68) |         |         |         |     |
| 20 BiJ     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 69) |         |         |         |     |
| 21 412     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 70) |         |         |         |     |
| 22 BiG     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 71) |         |         |         |     |
| 23 BiI     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 72) |         |         |         |     |
| 24 Beer2   | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 73) |         |         |         |     |
| 25 BiC     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 74) |         |         |         |     |
| 26 BiE2    | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 75) |         |         |         |     |
| 27 BiE4    | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 76) |         |         |         |     |
| 28 BiK     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 77) |         |         |         |     |
| 29 BiM     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 78) |         |         |         |     |
| 30 BiN     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 79) |         |         |         |     |
| 31 BiP     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 80) |         |         |         |     |
| 32 BiX     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 81) |         |         |         |     |
| 33 Beer1   | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 82) |         |         |         |     |
| 34 BiQ     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 83) |         |         |         |     |
| 35 BiW     | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 84) |         |         |         |     |
| 36 NMRI#57 | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 85) |         |         |         |     |
| 37 NMRI#11 | ACTGAAACAGACGTG CATGCTGTGAAAAAA CAAATGCAACAATCA GCTGCAAAACAA (SEQ ID NO: 86) |         |         |         |     |

Figure 3 *Bacillus globigii* specific PCR targeting Bg sasp-gamma

Alignment of *B. subtilis* sasp-gamma sequence (from GeneBank) with *B. globigii* sequence (upper strand) showing the location of the primer sequences and how their sequence compares to the (known) *B. subtilis* sequence:

